

PHOTO QUIZ

# A family with skin lesions

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A 45-year-old woman presented with a skin lesion on her right zygoma. Her 10-year-old daughter and 8-year-old son had also skin lesions on the left zygoma and left auricle, respectively (*figure 1, arrows; figures 2, 3, and 4*). The mother described a small acne-like lesion on her right zygoma. Since it persisted, she was given cream antibiotics. The lesion progressed despite the therapy and she noted her son's and daughter's lesions.

## WHAT IS YOUR DIAGNOSIS?

See page 44 for the answer to this photo quiz.

Figure 1



Figure 2



Figure 3



Figure 4



## ANSWER TO PHOTO QUIZ (PAGE 41)

### A FAMILY WITH SKIN LESIONS

This family was from Southeast Anatolia, which is an endemic area for leishmaniasis. Biopsies of the skin lesions revealed amastigotes in the tissue. The cultures on specific *Leishmania* media (Nicolle Novy MacNeal -NNN) showed promastigotes (figure 5).

*Leishmania* infection can be divided into cutaneous, mucocutaneous, or visceral disease. Cutaneous leishmaniasis is the most common form of leishmaniasis caused by a single-celled parasite. It is transmitted by sandfly bites. Cutaneous lesions tend to occur on exposed areas of skin. It begins as a red papule, enlarges to form an ulcer with granulomatous tissue at the base and raised, heaped up margins. The ulcers are characteristically painless unless secondarily infected.<sup>1</sup> Cutaneous leishmaniasis lesions typically undergo spontaneous resolution varying according to the infecting *Leishmania* species and the immune reaction of the host. A residual hypopigmented, depressed scar at the site is common following curation. Cutaneous leishmaniasis is treated to accelerate curation to reduce scarring, especially in cosmetic sites, and to prevent parasite dissemination (i.e. mucosal leishmaniasis) or relapse.<sup>2</sup>

The leishmaniasis are caused by *Leishmania*, a protozoon transmitted by the bite of a tiny 2 to 3 millimetre-long insect vector, the phlebotomine sandfly (figure 6).

Cutaneous leishmaniasis is endemic in more than 70 countries worldwide, and 90% of cases occur in

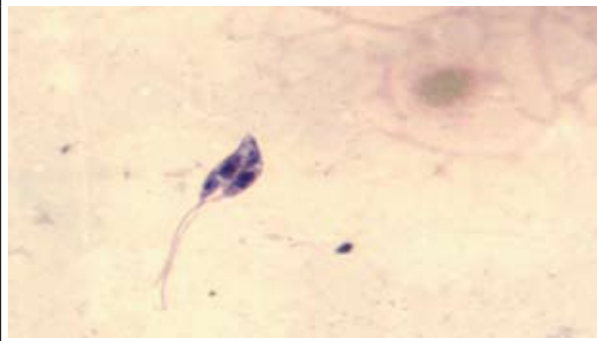
Afghanistan, Algeria, Brazil, Pakistan, Peru, Saudi Arabia, and Syria (figure 7).<sup>3</sup> There are about 1.5 million cases of cutaneous leishmaniasis worldwide each year and according to the World Health Organisation, leishmaniasis is endemic in 88 countries, with a total of 350 million people at risk.<sup>4</sup> It is a public health concern in most countries bordering the Mediterranean littoral<sup>5</sup> and also the southeast region of Turkey.<sup>6</sup> In relation to the recent increase of international military activity in Southwest and Central Asia, cutaneous leishmaniasis has become an increasing problem in military personnel. During deployment in northern Afghanistan, a total of 172 Dutch military personnel and three civilians embedded with the armed forces were infected with *L. major*.<sup>7</sup>

The development of one or more chronic skin lesions with the appropriate characteristics and a history of exposure in an endemic area suggest cutaneous leishmaniasis.

## REFERENCES

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**Figure 5**



**Figure 6**



source: [http://www.who.int/leishmaniasis/leishmaniasis\\_maps/en/index.html](http://www.who.int/leishmaniasis/leishmaniasis_maps/en/index.html)

**Figure 7**



source: [http://www.who.int/leishmaniasis/disease\\_epidemiology/en/index.html](http://www.who.int/leishmaniasis/disease_epidemiology/en/index.html)